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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,422	03/01/2002	Seiji Tatsuta	02133/LH	2283

7590

05/08/2003

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EXAMINER

NGUYEN, KIMBERLY D

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 05/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,422

Applicant(s)

TATSUTA ET AL.

Examiner

Kimberly D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Objections

2. Claims 2-3, 12-15 are objected to because of the following informalities:

The phrase "adapted to" is vague and indefinite. It has been held that the recitation that an element is "adapted to" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

- Claims 2, 3, 12-15; line 2: "adapted to" should be deleted.
- Claims 36, 40-41; line 3: "adapted to" should be deleted.

Appropriate correction is required.

3. Claims 4-28 are objected to because of the following informalities:

- Claim 4, line 3: Substitute "detecting/randomness providing" with "detecting".
- Claim 5, line 2: Substitute "detecting/randomness providing" with "detecting".
- Claim 16, line 2: Substitute "detecting/randomness providing" with "detecting".
- Claims 6-11, 18-22, 24-28; line 2: Substitute "detecting/providing" with "providing".
- Claims 12-15, line 6: Substitute "detecting/providing" with "providing".
- Claims 5, 16-17 and 23; line 3: Substitute "detecting/providing" with "providing".

The Examiner respectfully suggests the above substitutions and request Applicants to further clarify the phrases, such as "detecting/randomness providing" and "detecting/providing".

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The Examiner respectfully welcomes input or clarification from the Applicants, if Applicants disagree with the Examiner's suggestion.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4-11 and 16-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang (US 5,481,103).

Wang teaches a code reading apparatus (figs. 11 and 14) comprising:

a laser scanner and the means for decoding the code (see col. 3, lines 62-65) which serves as a reading section (42 in fig. 11; col. 7, line 62 through col. 8, line 11) for optically reading an optically readable code from a recording medium on which records data as the optically readable code;

an output section for performing an output based on the outcome of the code reading operation of the reading section (46 in fig. 11; col. 7, line 62 through col. 8, line 11); and

code packets may be randomly positioned to allow reader to encode/decode the randomly-positioned code packets (figs. 15a-15c and 16-17; col. 9, line 50 through col. 10, line 27), which apparently the code reading apparatus includes a randomness providing section for reading the randomly-positioned code and providing the outcome of the code reading operation

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of the reading section with randomness, thereby providing the output of the output section based on the outcome of the code reading operation with randomness.

Re claims 4-7, 16-18: Wang teaches each data unit in the proper position for reading and decoding purposes (col. 3, lines 3-37), wherein the position of data unit serves as parameter relating to the code reading operation.

Re claims 8, 19, 25, 30: Wang teaches a start and stop codes (20 and 22 in figs. 1-2; col. 6, lines 1-14), which serves as parameters relating to the brightness of each predetermined components of the code, wherein the black start and stop codes serve as the brightness.

Re claims 9, 20, 26, 31: Wang teaches a predetermined size surrounding packet A (in figs. 15b-15c; col. 10, lines 5-13), which serves as a parameter relating to the size of each of predetermined components of the code.

Re claims 10, 21, 27, 32: Wang teaches a non-rectangular of packet code (fig. 1; col. 4, lines 40-57), which serves as parameters relating to the shape of each of predetermined components of the code.

Re claims 11, 22, 28, 33: Wang teaches recovering of missing packets utilizing error correction, wherein missing packets serves as parameters relating to the missing information on the components missing from the read code.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 2-3, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Krichever et al. (US 5,396,054; hereinafter "Krichever"). The teachings of Wang have been discussed above.


Although, Wang teaches that his reader includes a laser scanner or other suitable devices (see col. 3, line 63+), Wang fails to teach or fairly suggests a handheld code reading apparatus.

Krichever teaches a hand-held barcode reader 70, which is inherently held by hand while reading the barcode and moved relatively to each other (fig. 10; col. 11, lines 8-62).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the handheld reader which is held during the code reading as taught by Krichever to the teachings of Wang in order to obtain a compact reader system which provides a greater convenience to the user for carrying the reader around for code reading purposes. Furthermore, by providing a compact code reading apparatus, it does not require the operator/user to physically carry over-size or heavy code reading apparatus to a single site to read the coded item/package; thus, alleviating the fatigue to the operator/user etc.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cymbalski et al. (US 5,324,923) teaches apparatus for producing a dynamically variable machine readable binary code and method for reading and producing thereof. Tsumura (US 5,250,747) teaches karaoke music reproduction device.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly D. Nguyen whose telephone number is 703-305-1798. The examiner can normally be reached on Monday-Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-8792.

KDN
May 5, 2003



**THIEN M. LE
PRIMARY EXAMINER**

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DETAILED ACTION

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Claim Objections

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code packets may be randomly positioned to allow reader to encode/decode the randomly-positioned code packets (figs. 15a-15c and 16-17; col. 9, line 50 through col. 10, line 27), which apparently the code reading apparatus includes a randomness providing section for

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reading the randomly-positioned code and providing the outcome of the code reading operation of the reading section with randomness, thereby providing the output of the output section based on the outcome of the code reading operation with randomness.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate a code reading apparatus with random code reading section as taught by Wang to further provide a machine readable code which can be positioned in arbitrary orders and configurations in order to reduce code management for encoding/decoding purposes (see abstract). Such modification would have been an obvious matter of design variation, i.e. to integrate randomness capability to the code reading apparatus as taught by Wang, **well within** the ordinary skill in the art, and therefore an obvious expedient.

Re claims 4-7, 16-18: Wang teaches each data unit in the proper position for reading and decoding purposes (col. 3, lines 3-37), wherein the position of data unit serves as parameter relating to the code reading operation.

Re claims 8, 19, 25, 30: Wang teaches a start and stop codes (20 and 22 in figs. 1-2; col. 6, lines 1-14), which serves as parameters relating to the brightness of each predetermined components of the code, wherein the black start and stop codes serve as the brightness.

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It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the handheld reader which is held during the code reading as taught by Krichever to the teachings of Wang in order to obtain a compact reader system which provides a greater convenience to the user for carrying the reader around ^{the facility} for code reading purposes. Furthermore, by providing a compact code reading apparatus, it does not require the operator/user to physically carry ^{the bulky item/packages} ~~over-size or heavy~~ code reading apparatus ^{to a code} ~~to a single site~~ ^{at a location} ~~to read the coded item/packages~~ ^{and any} thus, alleviating ^{any} the fatigue to the operator/user etc. ^{and/or any injury.}

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cymbalski et al. (US 5,324,923) teaches apparatus for producing a dynamically

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variable machine readable binary code and method for reading and producing thereof. Tsumura (US 5,250,747) teaches karaoke music reproduction device.

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KDN
May 2, 2003